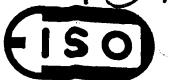




Cantina
SANYO



All fasteners subject to metric dimension of International Organization for Standardization.

Solid State FM/AM Portable Radio

MODEL 10F-821N

SERVICE MANUAL

SANYO ELECTRIC CO., LTD.

INTERNATIONAL DIVISION: SANYO ELECTRIC TRADING CO., LTD. OSAKA, JAPAN.



SPECIFICATIONS

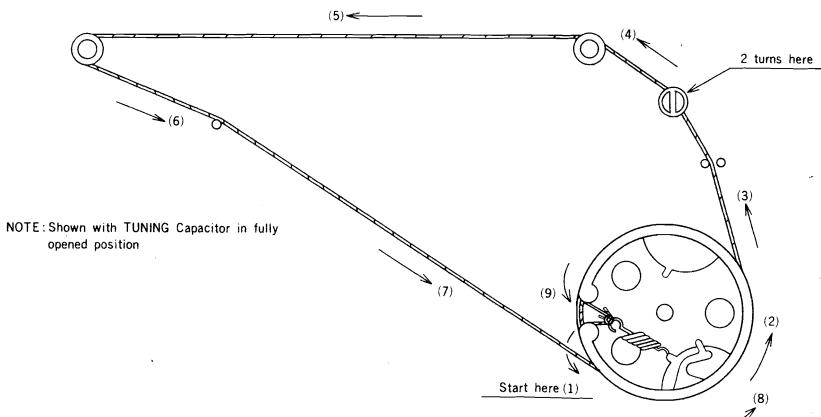
Frequency Range	FM 87.5 - 108 MHz MW 510 - 1605 KHz	Battery Four 1½V standard penlite batteries
Intermediate Frequency	FM 10.7 MHz MW 455 KHz	Current Drain No signal 19 mA Maximum 135 mA
Sensitivity (for 50 mW output)	FM (30 dB S/N) 7µV	Loudspeaker 4" x 2½" permanent dynamic type 8 ohm voice coil impedance
Output Power	Maximum 500 mW Undistorted 350 mW	Dimensions 7-1/8" wide x 4-5/8" high x 2-1/8" deep Weight 23 ozs.
		Outlet for low-impedance earphone & for external 6V DC

ALIGNMENT PROCEDURES

PROCEDURES	POSITION OF BAND SWITCH	SIGNAL INPUT	FREQUENCY OF SIGNAL GEN.	DIAL SETTING OF RADIO	COMPONENTS TO BE ADJUSTED
MW BAND	MW	IRE Loop	505 KHz 1650 KHz	Lowest end Highest end	Osc. coil L6 Osc. trimmer Ct-4
	" "	" "	570 KHz 1400 KHz	570 KHz 1400 KHz	Ant. coil L5 Ant. trimmer Ct-3
MW IF STAGE	" "	" "	570 KHz	570 KHz	IFT of IF Block T105
FM BAND	FM	Dummy Ant	87 MHz 108 MHz	87 MHz 108 MHz	Osc. coil L4 Osc. trimmer Ct-2
	" "	" "	88 MHz 108 MHz	88 MHz 108 MHz	VHF. coil L2 Ant. trimmer Ct-1
FM IF STAGE	" "	" "	88 MHz	88 MHz	IFT T1

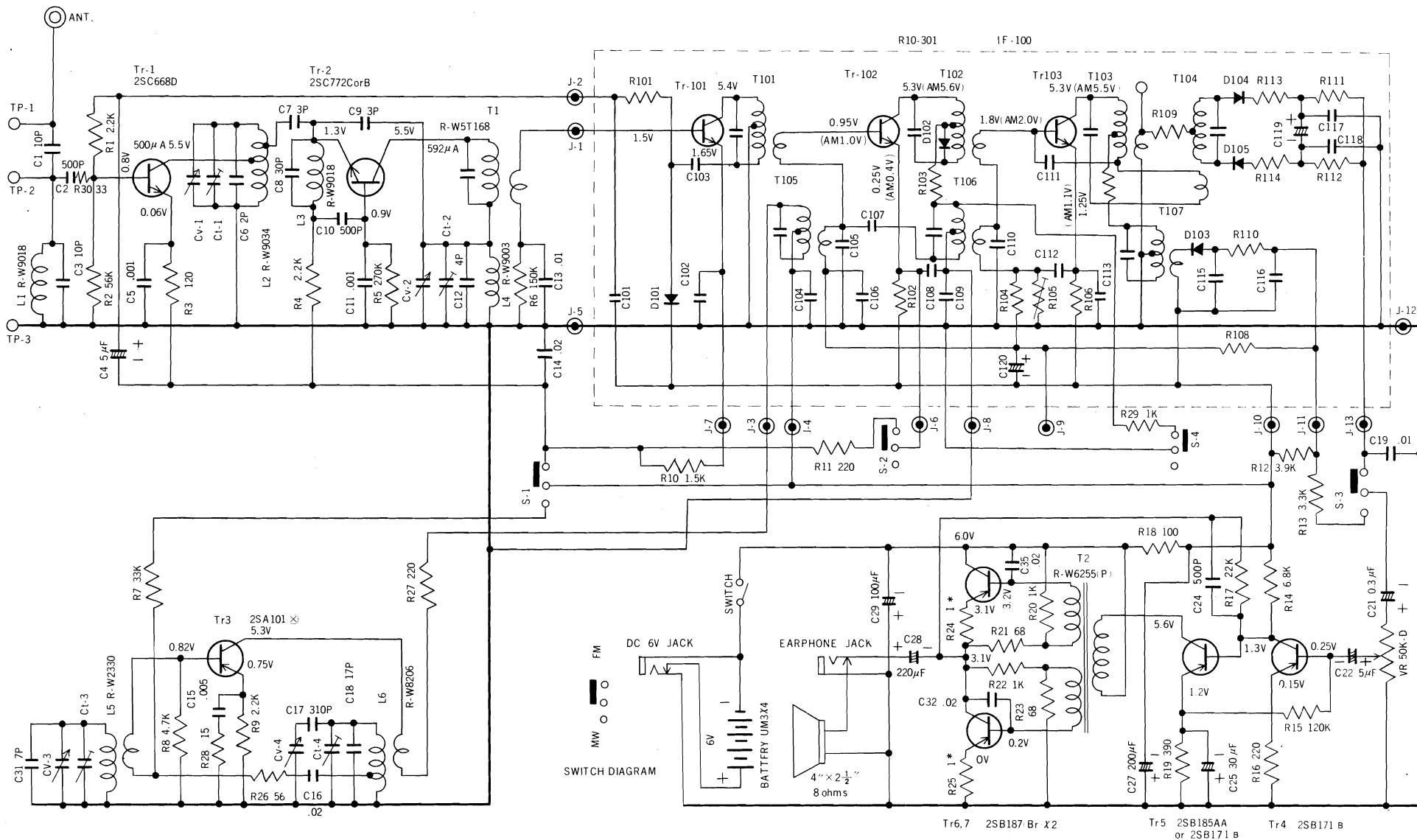
This radio incorporates a completely line-upped IF block stage, so that any arrangement shall not be required in ordinary servicing.
When there is some faulty evident in IF block stage, it may be replaced by new one.

DIAL CORD STRINGING

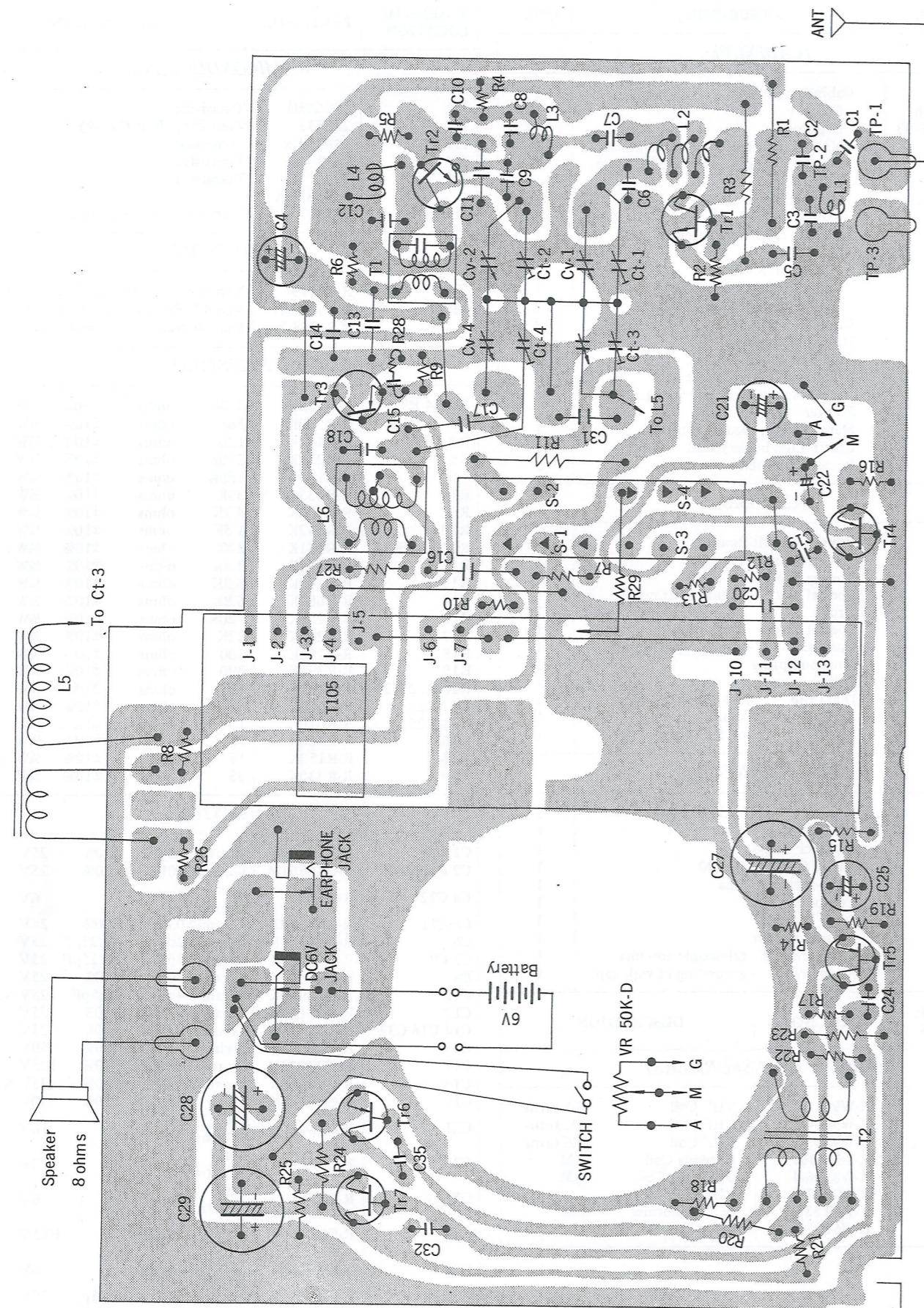


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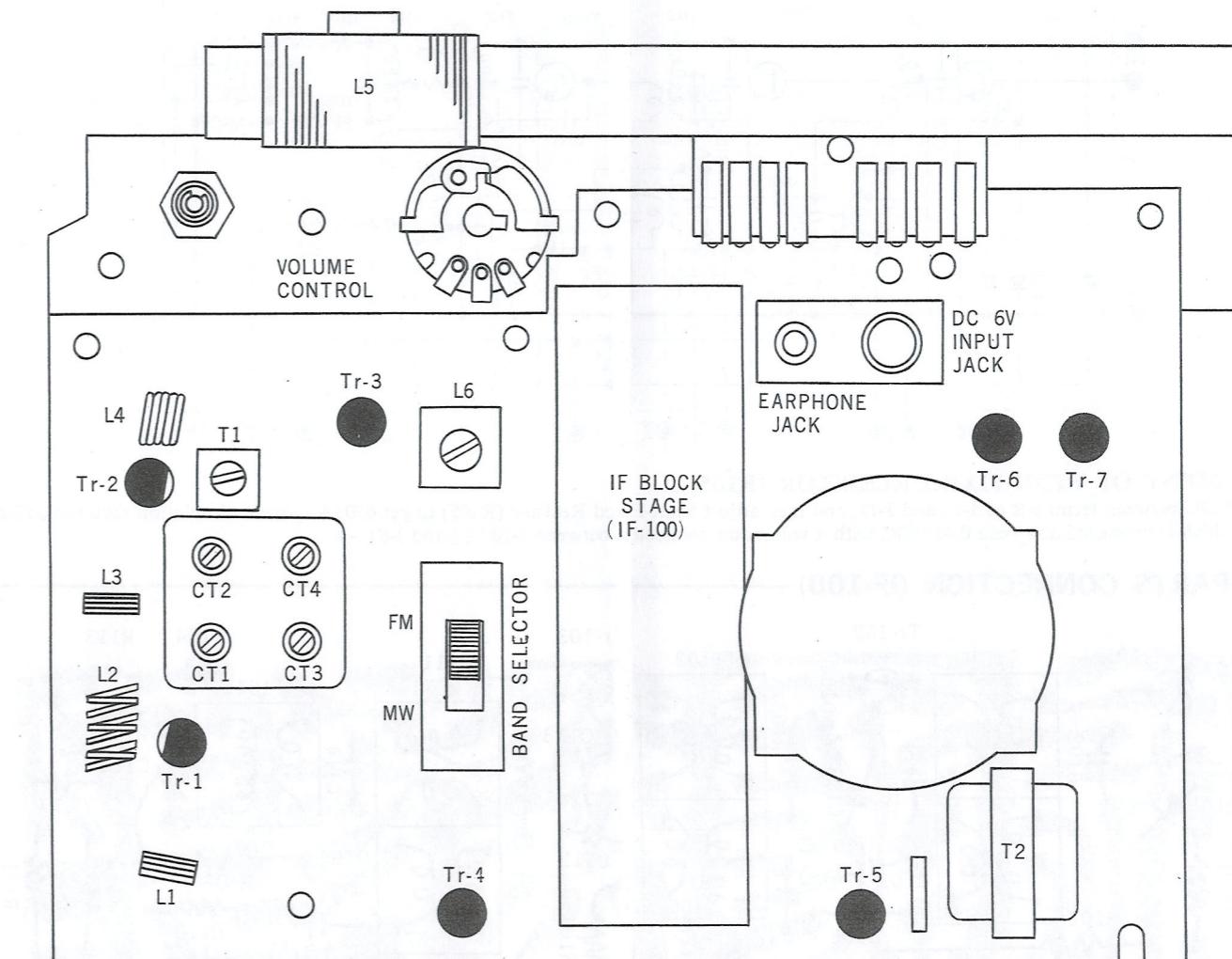
SCHEMATIC DIAGRAM



INTER PARTS WIRING ILLUSTRATION



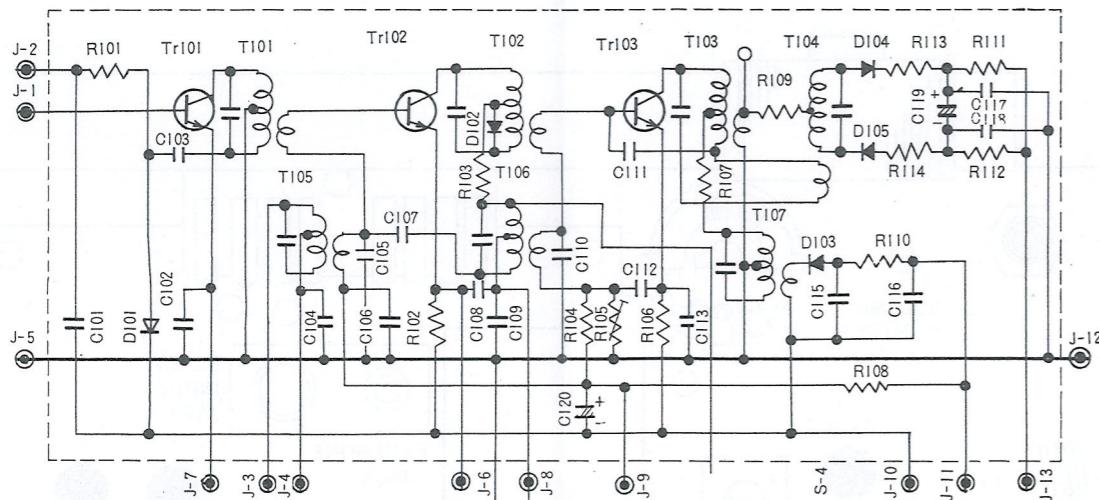
MAIN PARTS IDENTIFICATION



PARTS LIST

PART NO.	DESCRIPTION	
<i>(MAIN PARTS OF IF-100)</i>		
2SC545C	Transistor	Tr101 Tr103
2SC545D	"	Tr102
1S188	Diode	D101 D102 D103
1S188	Diode (pair)	D104 D105
R-41622a	Printed Circuit Board	
R-W5T308	IF Transformer	FM T101 T102
R-W5T309	IF Transformer	FM T103
R-W5T310	IF Transformer	FM T104
R-W5T311	IF Transformer	AM T105 T106
R-W5T312	IF Transformer	AM T107
R-R11011	Semi-fixed Resistor	100K R105
R-C9131 or	Electrolytic Capacitor	5μF 3V C119
R-C9154		
R-C9132 or	Electrolytic Capacitor	10μF 3V C120
R-C9153		

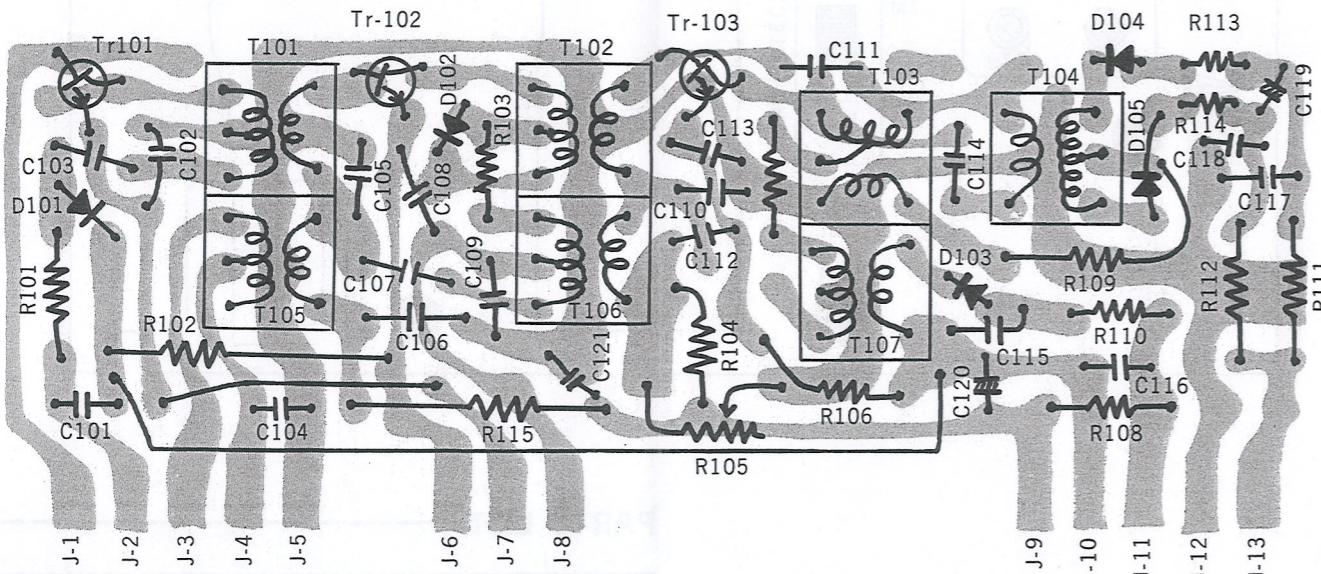
CIRCUIT DIAGRAM (IF-100)-



ADJUSTMENT OF SEMI-FIXED RESISTOR (R105)

Apply 5.5V DC between terminals of J-10 and J-11, and then adjust Semi-Fixed Resistor (R105) to get $650\mu\text{A}$ current circulation thru the collector of Tr102, which is measured and read 0.44V DC with a volt-meter connected between J-10 (+) and J-6 (-).

INTER-PARTS CONNECTION (IF-100)



PARTS LIST (IF-100)

RESISTORS & CAPACITORS

SYMBOL NO.	DESCRIPTION			
<i>(FIXED VALUE RESISTORS)</i>				
R101	6.8K	$\pm 20\%$	$\frac{1}{4}W$	Carbon-film
R102	680	$\pm 10\%$	"	"
R103	150	$\pm 20\%$	"	"
R104 R108	10K	"	"	"
R106 R113	1K	$\pm 10\%$	"	"
R107	150	$\pm 20\%$	"	"
R109	270	"	"	"
R110	1K	"	"	"
R111 R112	4.7K	$\pm 10\%$	"	"
R114	1K	"	$\frac{1}{16}W$	"

SYMBOL NO.	DESCRIPTION			
<i>(FIXED VALUE CAPACITORS)</i>				
C101 C102 C104 C109	0.01 μ F	+80%	25V	Ceramic
C112 C115 C121			"	
C103	10pF	$\pm 10\%$	25V	"
C105	0.005 μ F	$\pm 20\%$	"	Rutyl
C106 C108 C113	0.02 μ F	+80%	"	Ceramic
C107	2pF	$\pm 0.25pF$	"	"
C110 C117 C118	0.001 μ F	$\pm 20\%$	"	Rutyl Disc
C111	1pF	$\pm 0.25pF$	"	Ceramic
C114	30pF	$\pm 10\%$	"	"
C116	0.01 μ F	$\pm 20\%$	"	Rutyl

RARTS LIST

WM-117 June, 1970 printed in Japan